

Distr: 4E2a(j)/4E3b/4E3d

Peroxide Initiated polymerization of allyl furylacrylate  
As: Trifanov and Iv. M. Panafotov. *Izv. Akad. Nauk SSSR*, 1958, No. 6, 169-171 (Russian summary)  
212, German summary 213).—In the presence of  $Bz_2O_2$ , allyl furylacrylate (I) began to polymerize at  $160^\circ$  to a  $C_6H_6$ -sol. liquid (II) and above  $200^\circ$  to a  $C_6H_6$ -insol. resin (III). Rates were detd. with 1.5-2.0 ml. samples of I in ampuls, analyzed for II and III. At  $220^\circ$ , the rate was independent of the  $Bz_2O_2$  concn.; therefore initiation was probably by hydroperoxides resulting from the action of  $Bz_2O_2$  on I. Reaction of I under N with 160 mg.  $Bz_2O_2$ /ml. I gave in 60-80 hrs. a liquid (IV) which showed 3 different peroxidic groups by polarography; upon refluxing IV 18 hrs. in  $C_6H_6$ -MeOH, only 1 group remained; it was assumed to be the hydroperoxide. IV initiated the polymerization at  $160^\circ$ ; air-oxidized I was not an initiator. Infrared spectra of polymers obtained by thermal or peroxide initiation were similar: the furyl groups were absent, and allylic and acrylic acid groups were weakened. G. H. Meguerian

3  
1-Bu(Blw)  
2-Ts5(wg)(mav)  
1-JT(III)

100/4A

VARINSKIY, F.I., kandidat tekhnicheskikh nauk; POTAPOV, N.V., inzhener;  
TRIFONOV, A.A.

Equipment used in making reinforced concrete tubings. Stroi. i  
dor. mashinostr. ? no. 5:18-21 My '57. (MLRA 10:5)  
(Concrete, Reinforced) (Leningrad--Tunneling)

TRIFONOV, A.G.

Labor productivity is being increased. Metallurg 3 no.7:18-  
19 J1 '58. (MIRA 12:1)

1. Nachal'nik martenovskogo tschka No.2 Magnitogorskogo  
metallurgicheskogo kombinata.  
(Magnitogorsk--Open-hearth furnaces)

VORONOV, F.D., inzh.; DIKSHTEIN, Ya.I.; ZUTS, K.A., kand.tekhn.nauk, dots.;  
TRIFONOV, A.G.

Converting a 400-ton open-hearth furnace to operation on sulfurous  
fuel oil. Stal' 12 no.2:112-116 F '59. (MIRA 12:2)

1. Magnitogorskiy metallurgicheskiy kombinat i Magnitogorskiy  
gornometallurgicheskiy institut.  
(Open-hearth furnaces) (Petroleum as fuel)

AUTHOR: Trifonov, A.G.

SOV/130-58-7-8/35

TITLE: We Are Increasing Labour Productivity (Povyshayem proizvoditel'nost' truda)

PERIODICAL: Metallurg, 1958, Nr 7, pp 18 - 19 (USSR)

ABSTRACT: The author outlines recent developments in the Magnitogorsk Combine Nr 2 melting shop (of which he is the manager) which have led to the labour-productivity increase to 154.6% of the 1950 value. Useful suggestions adopted in that period amount to over a hundred. Ladle lining life has been increased from 8 to 15 heats by changing to Semilukskiy brick and mould capacity raised from 1.3 to 1.75 m<sup>3</sup>. In 1957, Nr 2 melting shop was enlarged by amalgamation with Nr 1, the saving in manpower enabling the 7-hour day to be introduced without personnel increases. Among measures adopted by the author for the future are: provision of a second mixer; hot-metal ladle capacity increase to 90 tons; provision of additional pouring service and scrap cranes and improvement of scrap distribution; sorting of iron ore by iron content; adoption of evaporative cooling. Finally, the author discusses refractory quality and makes a plea to the Chelyabinsk economic council (Sovnarkhoz)

card 1/2

We Are Increasing Labour Productivity

SOV/130-58-7-8/35

to secure better quality powder and brick from the Satkinskiy Works.

There are 3 photographs

ASSOCIATION: Magnitogorskiy metallurgicheskiy Kombinat  
(Magnitogorsk Metallurgical Combine)

Card 2/2      1. Steel--Production    2. Refractory materials--Effectiveness

FREYDENBERG, A.S.; DIKSHTEYN, Ye.I.; TRIFONOV, A.G.; ARTAMONOV, M.P.;  
TVOROGOV, A.R.; SHAKHIN, V.I.; TARASOV, A.Y.

Repair of tapping holes on open-hearth furnaces. Metallurg 9  
no.7:20-22 Jl 14. (MIRA 17:8)

1. Magnitogorskiy metallurgicheskiy kombinat.

SOV/133-59-2-5/26

AUTHORS: Voronov, F.D., Engineer,  
Dikshteyn, Ye.I.,  
Zuts, K.A., Candidate of Technical Sciences, Docent  
Trifonov, A.G.

TITLE: An Experience in Converting a 400 Ton Open Hearth Furnace  
to Firing with Sulphurous Fuel Oil (Opyt perevoda 400-t  
martenovskoy pechi na sernistyy mazut)

PERIODICAL: Stal', 1959, Nr 2, pp 112-116 (USSR)

ABSTRACT: The Magnitogorsk Metallurgical Combine was designed with  
a balanced fuel economy i.e. coal was delivered only for  
coking and the coke oven and blast furnace gases should  
be sufficient for all other fuel requirements. However,  
an improvement in the operation of blast furnaces lead  
to a considerable decrease in the coke consumption and  
thus to a decrease in the output of coke oven gas. Moreover,  
the calorific value of blast furnace gas decreased from  
944 K cal/m<sup>3</sup> in 1952 to 866 K cal/m<sup>3</sup> in 1957 and its  
consumption for heating blast increased as much higher  
blast temperatures are used. In addition some new gas

Card 1/3

SOV/133-59-2-5/26

An Experience in Converting a 400 Ton Open Hearth Furnace to Firing with Sulphurous Fuel Oil

consumers were introduced (sheet rolling mill etc.) so that a wider use of fuel oil became necessary. A description of the transfer of a 400 ton open hearth furnace from firing with a mixture of coke oven and blast furnace gas to oil firing and operational results obtained is given. The design of the furnace remained the same only the design of parts was modified. Oil was supplied through two injectors placed outside of the casing. The two oil flames from both sides of the gas part unit into one flame at a distance of 1 m from the injectors (Fig.2). Air is being blown by a fan via former gas conduit. The following operational results were obtained: consumption of conventional fuel 105 kg/t of steel instead of previous 130 kg/t; mean duration of heat 12 hrs 15 min instead of 13 hours; the durability of regenerators to the first hot repairs 274 heats instead of 170; the volume of the regenerators changed during small cold repairs 260 m<sup>3</sup> instead of 350 m<sup>3</sup>. However, due to high sulphur content of oil (about 2%) a noticeable increase of the transfer

Card 2/3

SOV/133-59-2-5/26

An Experience in Converting a 400 Ton Open Hearth Furnace to Firing with Sulphurous Fuel Oil

of sulphur to the metal bosh was observed. For this reason smelting of steels in the furnace was limited to grades with the permissible sulphur content of 0.045%. There are 9 figures.

ASSOCIATION: Magnitogorskiy Metallurgicheskiy Kombinat i  
Magnitogorskiy Gorno-metallurgicheskiy Institut  
(Metallurgical Combine and Magnitogorsk Institute of Mining Metallurgy)

Card 3/3

AUTHOR: Trifonov, A.G.

SOV/130-58-7-8/35

TITLE: We Are Increasing Labour Productivity (Povyshayem proizvoditel'nost' truda)

PERIODICAL: Metallurg, 1958, Nr 7, pp 18 - 19 (USSR)

ABSTRACT: The author outlines recent developments in the Magnitogorsk Combine Nr 2 melting shop (of which he is the manager) which have led to the labour-productivity increase to 154.6% of the 1950 value. Useful suggestions adopted in that period amount to over a hundred. Ladle lining life has been increased from 8 to 15 heats by changing to Semilukskiy brick and mould capacity raised from 1.3 to 1.75 m<sup>3</sup>. In 1957, Nr 2 melting shop was enlarged by amalgamation with Nr 1, the saving in manpower enabling the 7-hour day to be introduced without personnel increases. Among measures adopted by the author for the future are: provision of a second mixer; hot-metal ladle capacity increase to 90 tons; provision of additional pouring service and scrap cranes and improvement of scrap distribution; sorting of iron ore by iron content; adoption of evaporative cooling. Finally, the author discusses refractory quality and makes a plea to the Chelyabinsk economic council (Sovnarkhoz)

Card 1/2

We Are Increasing Labour Productivity

SOV/130-58-7-8/35

to secure better quality powder and brick from the Satkinskiy Works.

There are 3 photographs

ASSOCIATION: Magnitogorskiy metallurgicheskiy Kombinat  
(Magnitogorsk Metallurgical Combine)

Card 2/2      1. Steel--Production    2. Refractory materials--Effectiveness

VORONOV, F.D., prof.; D'YAKONOV, A.I., kand.tekhn.nauk; DIKSHTEYN, Ye.I., inzh.;  
TRIFONOV, A.G., inzh.; LORMAN, V.V., inzh.; KAZAKOV, A.I., inzh.; KOVALIK,  
I.S., tekhnik

Technological characteristics of Magnitogorsk Metallurgical Combine open-hearth furnace operations using compressed air in the fuel spray. Stal' 23 no.12:1088-1091 D '63. (MIRA 17:2)

1. Magnitogorskiy metallurgicheskiy kombinat i Magnitogorskiy gorno-metallurgicheskiy institut.

SOLOVKOV, Aleksandr Konstantinovich; TIKHONOV, Aleksey Grigor'yevich;  
YELIZAROV, Aleksandr Georgiyevich; PANFILOV, M.I., redaktor;  
KEL'NIK, V.P., redaktor izdatel'stva; ZEF, Ye.M., tekhnicheskiy  
redaktor

[Laying and fettling of the hearth of open-hearth furnaces; practices  
of the Magnitogorsk Metal Combine] Kladka i navarka poda martenovskikh  
pechei; opyt Magnitogorskogo metallurgicheskogo kombinata. Sverdlovsk,  
Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii,  
Sverdlovskoe otd-nie, 1957. 109 p.

(MIRA 10:7)

(Open-hearth furnaces)

VORNOV, F.D.; BIGEYEV, A.M.; DIKSHTEIN, Ye.I.; TRIFONOV, A.G.; KAZAKOV, A.I.; KOROLEV, A.I.; BORODIN, G.L.; ANTIPIN, V.G.; KULAKOV, A.M.; KOZHANOV, M.G.; GAZHUR, V.F.

Investigating the operation of 400-ton open-hearth furnaces following redesign. Stal' 22 no.10:904-907 0'62. (MIRA 19:10)

1. Magnitogorskiy metallurgicheskiy kombinat i Magnitogorskiy gorno-metallurgicheskiy institut.  
(Open-hearth furnaces)

TRIFONOV, A.M.

MOISEYEV, A.A., professor; TRIFONOV, A.M., kandidat tekhnicheskikh nauk.

Life and work of M.I. Ianovskii. Trudy VNIITOSS 6 no.3:5-12 '55.  
(Ianovskii, Mikhail Iosifovich, 1888-1949) (MLRA 10:4)

Name : TRIFONOV, Am.

Remarks : Am. TRIFONOV is the author of a long article entitled "V Chasy Istoricheskogo Poleta" (During the Hours of the Historic Flight) giving an extended description of Major Titov's flight into outer space, and the description of a coordination and computing center controlling the flight.

Source : Pravda #230, 17 Aug 1961, pp. 2 and 6.

27 10

TRIFONOV, An.

"An Atomic Power Plant," Pravda, 10 Aug 55.

Current Digest of the Soviet Press, Vol. VII, No.33, 28 Sep 55

TRIFONOV, AN.

"At the Atomic Electric Power Station," Pravda, No. 222, page 2, 10 Aug 55

Translation M-1094, 30 Apr 56

TRIFONOV, An.

"Atom-Powered Icebreaker," Pravda, p. 3, 12 Feb 56

Current Digests of the Soviet Press, Vol. VIII, No.6, 21 Mar 56

TRIFONOV, A.P. (Irkutsk, ul. Lenina, d.22, kv.34).

Traumatism in coal mining industry in prerevolutionary Russia.  
Ortop., travm. i protez. 25 no.4:61-64 Ap '64 (MIRA 18:1)

1. Iz Irkutskogo instituta travmatologii i ortopedii (direktor -  
prof. Z.V. Bazilevskaya).

TRIFONOV, A.P.

Trauma and its control in the pre-revolutionary Cherembass.  
Ortop., travm.i protez. no.7:49-52 '61. (MIRA 14:3)

1. Iz Irkutskogo nauchno-issledovatel'skogo instituta travmatologii i ortopedii (dir. - prof. Z.V. Bazilevskaya).  
(CHEREMKHOV BASIN--MINE ACCIDENTS)

YERMAKOV, Yu.I.; BORESKOV, G.K.; DZIS'KO, V.A.; IVANOVA, L.I.; TRIFONOV,  
A.S.

Polymerization of ethylene on a chromia catalyst without a solvent.  
Khim.prom. no.7:496-498 Jl '63. (MIRA 16:9)

BOGDANOV, K.D.; DELIBASH, B.A.; VENETSIANOV, Ye.A.; GUREYEV, V.A.;  
ZHIVOV, M.S.; ZEVAKIN, A.I.; NAYFEL'D, M.R.; NEYMAN, Kh.G.;  
KUZNETSOV, N.P.; RIZOVATOV, A.V.; RUBINSSTEIN, Ya.A.;  
TRIFONOV, A.N.; TRUNKOVSKIY, L.Ye.; KHROMCHENO, G.Ye.

[Organization and performance of electrical equipment installation operations] Organizatsiya i proizvodstvo elektromontazhnykh rabot. Moskva, Stroizdat, 1964. 602 p.  
(MIRA 18:3)

TRIFONOV, A.; IORDANOV, B.

Determination of selenium by former electrolysis. Izv Inst khim  
BAN no.8:115-121 '61.

TRIFONOV, As.  
Setname (in caps); Given Name(s)

Country: Bulgaria

Academic Degrees: not indicated

Affiliation: not indicated

Source: Sofia, Priroda, No 1, Jan/Feb 61, pp 69-71

Data: "Complexometry--A Branch of Contemporary Analytic Chemistry."

TRIFONOV, A.Ye.

Some characteristics of the microvascularization of the human myocardium. Trudy Khab. med. inst. 23 no.2:23-25 '62  
(MIRA 16:12)

1. Iz kafedry normal'noy anatomi (zav. - dotsent A.Ye Trifonov) Khabarovskogo meditsinskogo instituta i kafedry normal'noy anatomi (zav. - prof. M.G.Prives) 1-go Lenogradskogo imeni akademika I.P.Pavlova meditsinskogo instituta.

GACHEV, B., inzh.; TRIFONOV, B., inzh.

Starting the synchronous and asynchronous motors at the pumping stations with the aid of a reactor in the station.  
Ratsionalizatsiya 11 no.12:19-20 '61.

TRIFONOV, B., inzh.

Automatic machine for the two-way filling of transformer and  
choke coils with the E and I shaped laminac. Mashinostroene  
12 no.6:36-37 Je'63.

TRIFONOV, B., inzh.

Automatic control of stage light effects and electric equipment according to the previously prepared program.  
Ratsionalizatsiia no.11:21-22 '62.

TRIFONOV, B., inzh.

Horizontal electric table for semiautomatic production of  
waffle wafers. Ratsionalizatsiya 13 no.6:19 '63.

TRIFONOV, Boris Alekseyevich, inzh.; BARANOV, I.A., inzh., red.; SHILLING, V.A., red. izd-va; GVIITS, V.L., tekhn. red.

[Making large forgings of 1Kh18N9T steel] Izgotovlenie krupnykh pokrovok iz stali 1Kh18N9T. Leningrad, 1961. 14 p. (Leningradskii Dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opyтом. Seriya: Goriachaya i kholodnaia obrabotka metallov davlenim, no.3)

(MIRA 14:10)

(Steel forgings)

TRIFONOV, D. H.

PAGE 1 BOOK EXPLOSIONS 507/94

Kostyuk, P.V., Candidate of Technical Sciences, Doctor, Ed.  
 Publishing outfit No.13 (Advanced Experience in Forging) [Leningrad] Lenistdat,  
 1959, 246 p., 5,000 copies printed.

Ed.: Ye.N. Koval'yavno; Tech. Ed.: I.M. Trifonov.

REPORT: This collection of articles is intended for workers and engineers in steel-forging shops and for persons or affiliated branches in the machine industry.

CONTENT: The articles deal with the advanced experience of a number of Leningrad plants in mechanizing and improving production methods in the forging. Recommendations are made concerning the specialization of forging shops, and the further development of open-die forging processes. Articles by open-innovators in forging shops of the Sovzavtchmet' (New Kazakhstan) and Uralsk (Ural) metalworking plants are included. The collection contains some of the papers which were discussed during the conference in June 1958 (Ye.V. Kostyuk, Chairman) on open-die forging, called by the National section for the preservation of metals of the Leningrad Branch of the All-Union Scientific-Research Institute of the Scientific and Technical Society of the Machine Industry and the corresponding Non-Metallurgical Technical Propaganda (Leningrad Union of Scientific and Technical Propaganda). The forward includes a list of the participants who submitted papers to the aforementioned conference. There are no references.

NOTIFICATION: Chief Project Engineer, Increasing shop, FAKING  
 Forgings From Globe-Form Ingots

Advanced Experience in Forging

507/94A

Golosheva, N.I., Engineer, For Pressing of Steel Ingots Instead of Forging  
 Bars

Godilov, P.M., Chief of Section, Improving the Press-Forging Processes

Martynov, M.P., Operator-Innovator, Making Large Forgings With Reduced  
 Maintenance and Reducing Declination From the Given Dimensions

Golosheva, S.I., Engineer, V.I. Kuz'min, Candidate of Technical Sciences,  
 and V.M. Plamenev, Engineer, "New Methods of Making Hydrodynamic Shocks",  
 1953

Filimonov, P.M., Senior Foreman, Experience in the Operation of a 12,000-ton  
 Drop-Forging Press

Mitashov, V.M., Operator-Innovator, Save of Socialistic Labor. Experience in  
 Improving Efficient Forging Processes on a 1000-ton Press

Dobilov, S.L., Deputy Chief of Shop, and I.M. Starik, Engineer, From the  
 Experience of the Leningradsky Metal'nyy Zavod (Leningrad Metal Plant)

Kirilenko, P.M., Chief of Section, V.B. Kargin, Engineer, and G.I. Olsuf'ev,  
 Head Operator-Innovator, Advanced Experience of the Forging Operation at  
 the Oral Plant.

Anishev, M.I., Chief Process Engineer, Forging Shop. Examples of Press Line  
 Efficiency in the Drop-Forging Processes

Makritians, I.M., Engineer, Forging Efficiency in the Drop-Forging Pro-  
 cesses

Serezhnikov, M.M., Operator-Innovator, Examples of Promoting Efficiency  
 in the Production of Small Forgings

AVAILABLE: Library of Congress

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MUSTAFINA, Fatyma Khamidovna; GALAGANENKO, Z.I., red.; TRIFONOV, B.V.,  
red.; POPOV, N.D., tekhn.red.

[In the family of equal nations] V sem'ye ravnopravnnykh narodov.  
Moskva, Izd-vo "Sovetskaya Rossiya," 1959. 53 p. (MIRA 13:4)

1. Zamestitel' predsedatelya prezidiuma Verkhovnogo Soveta RSFSR;  
ministr prosveshcheniya Bashkirskoy ASSR (for Mustafina).  
(Bashkiria--Economic conditions)

TRIFONOV, D.

Where is the end of Mendeleev's system. Znam.-sila 37 no.8:  
17-19 Ag '62. (MIRA 16.5)  
(Transuranium elements)

TRIFONOV, D.

Our honorable brother indium! Znam.-sila 38 no.6:18 Je '63.  
(MIRA 16:8)  
(Indium)

TRIFONOV, D.

The very first and the most mysterious. Znan. sila 38 no.9;  
(MIRA 16:12)  
6-9 S '63.

TRIFONOV, D.  
"International excursion to study plant protection and quarantine provisions in our  
country" (p. 12) KOOPERATIVNO ZEMEDELIE  
("ministerstvo na zemadelieto") Sofiya Vol 8 No 7 1953  
SO: East European Accessions List Vol 2 No 7 Aug 1954

BULGARIA/Farm Animals - Honeybee

Q

Abs Jour : Ref Zhur - Bi.L., No 15, 1958, 69444

Author : Petkov, V., Trifonov, D.

Inst : -

Title : Are the Preparations Toxaphene and Cholphidal Harmful  
for Local Bees?

Orig Pub : Pchelarstvo, 1957, No 9, 20-23

Abstract : In Bulgaria, the beetle Epicometis hirta Poda of the  
Scarabaeidae family causes extensive damage to field  
crops, horticulture and R-sales. To control this beetle,  
toxaphene and cholphidal in the form of dust and aerosol  
were proposed. The experiments which were repeated  
thrice showed that toxaphene in the form of dust caused  
the destruction of 31.22% of bees and in the form of  
aerosol only 1.47%. Cholphidal accounted for 0.28% and  
0.59%, respectively. Both preparations are suitable in  
the form of aerosols, and cholphidal can also be applied  
in the form of dust. -- V.A. Karizuba

Card 1/1

- 70 -

TRIFONOV, D. (Leningrad)

Coordinating the academic work of the economics departments of  
the Leningrad institutions of higher learning. Vop. ekon. no.3:  
157-158 Mr '62. (MIRA 15:3)

(Leningrad--Economics--Study and teaching)

TRIFONOV, D.

Concluding the discovery. Znan.-sila 37 no.12;40-42 D '62.  
(MIRA 16:2)  
(Chemical elements)

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001756610013-1

TRIFONOV, D.

The universe... melts. Znan.-sila 38 no.2:42-44 F '63.

(Radioactive substances--Decay) (MIRA 16:3)

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001756610013-1"

BOBROV, L.; VASILEVSKIY, V.; VLASOV, L.; DRAGUNOV, E.; KAPUSTINSKAYA, K.;  
KARELIN, V.; LOSHCHILOV, G.; MAKARENKA, A.; MEDVEDEV, Yul.;  
ROMAN'KOV, Yu.: SENCHENKOVA, T.; SENCHENKOV, A.; TRIFONOV, D.;  
ANTOYUK, L., red.; LESHCHINSKAYA, G., tekhn. red.

[Journey into the land of the elements] Puteshestvie v stranu  
elementov. [By] L.Bobrov i dr. Moskva, "Molodaia gvardiia,"  
1963. 366 p. (MIRA 16:10)

(Chemical elements)

TRIFONOV, D.

Where did the atoms ~~come~~ from? Znan.-sile 37 no. 7:20-23  
Jl '62. (Astrophysics) (MIRA 15:9)

TRIFONOV, D.

Element from a "sealed envelope"? Znan.-sila 37 no.5:21-23 My  
'62. (MIRA 15:9)  
(Chemical elements)

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001756610013-1

TRIFONOV, D.

Conditions for the Normal Operation of Trap Mechanism on Cards. (Light  
Industry), #1:16:Jan. 55

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001756610013-1"

TRIFONOV, D.

Pneumatic Transportation and its Application in the Furniture Industry.  
(Light Industry), #1:20:Jan. 55

TRIFONOV, D.

Necessity of reconstruction and completion of the old machines in the cotton-spinning factories.

P. 11, (Lika Promishlenost) Vol. 6, no. 2, 1957, Sofia, Bulgaria

SO: Monthly Index of East European Acessions (EEAI) Vol. 6, No. 11 November 1957

T. Trifonov, G.

Trifonov, D. Condition for normal operation of the vibrating mechanism of a carding machine. p. 16. LEXA PUBLISHING, Sofia. Vol. 4, no. 1, 1955.

SO: Monthly List of the East European Accessions, (EEL), LC. Vol. 4 no. 10, Oct. 1955. Uncl.

TRIFONOV, D.

Pneumatic-tube transportation and its utilization in the furniture industry. p. 20.  
LEKA PROMISLENOST, Sofiya, Vol. 4, no. 1, 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955,  
Uncl.

TRIFONOV, D.

Trifonov, D. Pneumatic-tube transportation and its utilization in the furniture industry. 1959. LEXIA PROCTSYL'KOGI. Seriya. Vol. 4, no. 1, 1959.

SO: Monthly List of the East European Acquisitions, (EAL), EC. Vol. 8, no. 10, Oct. 1959. Uncl.

TRIFONOV, D.

Condition for normal operation of the vibrating mechanism of a carding machine. p.16.  
LEKA PROMISHLENOST, Sofiya, Vol. 4, no. 1, 1955.

SO: Monthly List of East European Accessions, (ESEA), LC, Vol. 4, no. 10, Oct. 1955,  
Uncl.

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001756610013-1

TRIFONOV, D.

Stranger from the sun. Nauka i zhizn' 28 no.8:65 Ag '61.  
(MIRA 14:8)  
(Helium)

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001756610013-1"

TRIFONOV, D.

Unusual career. Nauka i zhizn' 28 no.8:65 Ag '61. (MIRA 14:8)  
(Lithium)

TRIFONOV, Dimitur, tekh.

Technical progress goes on. Tekh delo no.440;1 25 Ag '62.

1. Predsedatel na NTD, Druzhestvoto "Marek", Polski Trumbesh.

TRIFONOV, D.K., dots., otv. red.; LAMAGINA, G.K., red.; ZHUKOVA, Ye.G.,  
tekhn. red.

[Problems in labor productivity under socialism] Voprosy proiz-  
voditel'nosti truda pri sotsializme. Leningrad, Izd-vo Leningr.  
univ., 1961. 198 p. (MIRA 15:1)

1. Leningrad. Universitet.  
(Labor productivity)

TRIFONOV, Dmitriy Konstantinovich; MIKHLIN, Ye.I., red.

[General economic laws] Obshchie ekonomicheskie zakony  
Leningrad, Izd-vo Leningr.univ., 1964. 273 p.  
(MIRA 18:2)

TRIFONOV, D.N.

In the sayan Mountains. Zdorov'e 3 no.7:9-11 J1 '57. (MLEA 10:8)  
(SAYAN MOUNTAINS--DESCRIPTION AND TRAVEL)

NESTEROVA, N.M., NESMIEYANOV, A.N. akademik, glavnnyy red.; TOPCHIYEV, A.V..  
akademik, zam.glavnogo red.; ISAKOVA, O.V., otv.red.; LIKHTENSHTEYN,  
Ye.S., otv.red.; SHUNKOV, V.I., otv.red.; TROFIMOV, D.N., red.;  
MARKOVICH, S.G., tekhn.red.

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(Uranyl compounds)

TRIFONOV, Dmitriy Nikolayavich; SAGURO, M.A., red.; MAZEL', Ye.I.,  
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[Element 61, its present, past, and future] Element 61, ego  
proshloe, nastoiaishchее i budushchее. Moskva, Gos.izd-vo lit-ry  
v oblasti atomnoi nauki i tekhniki, 1960. 54 p.

(MIRA 14:1)

(Promethium)

PHASE I BOOK EXPLOITATION

SOV/5183

Trifonov, Dmitriy Nikolayevich

Element 61, yego proshloye, nastoyashcheye i budushcheye (Element 61, Its Past, Present, and Future) [Moscow] Atomizdat [1960] 54 p.  
15,000 copies printed. (Series: Nauchno-populyarnaya biblioteka  
Atomizdata)

Ed.: M. A. Saguro; Tech. Ed.: Ye. I. Mazel'.

PURPOSE: This booklet is intended for the general reader.

COVERAGE: The booklet presents a historical account of the discovery of promethium, element 61, and of the other rare earth elements in the periodic system. The author provides a description of their properties and characteristics. No personalities are mentioned. There are no references.

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Instead of a Foreword

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PHASE I BOOK EXPLOITATION

SOV/3742

Trifonov, Dmitriy Nikolayevich

Redkozemel'nyye elementy (Rare-Earth Elements) Moscow, Izd-vo AN SSSR, 1960.  
131 p. (Series: Akademiya nauk SSSR. Nauchno-populyarnaya seriya)  
10,000 copies printed.

Resp. Ed.: Yu. S. Sklyarenko; Ed. of Publishing House: Yu. S. Sklyarenko;  
Tech. Ed.: O. G. Ul'yanova.

PURPOSE: This book is intended for the general reader, but may also be  
of interest to chemists and specialists of related branches of science  
and technology.

COVERAGE: The book describes the history of the discovery of rare-earth  
elements, their properties, the methods of their separation, and  
their practical application in metallurgy, chemistry, electrical engin-  
eering and radio technology, nuclear reactors, the glass, ceramics, tex-  
tile and leather industries, and medicine. A description and schematic  
drawing of a small atomic battery are given. The author also discusses  
the present status of the problems of the rare-earth elements.

Card 1/4

**Rare-Earth Elements**

SOV/3742

Candidate of Chemical Sciences Yu. S. Sklyarenko is thanked for help  
in editing the book. There are 16 references, 12 Soviet, 2 French, and  
2 English.

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[Outline history of physical chemistry] Ocherki po istorii fizicheskoi khimii. Moskva, Izd-vo "Nauka," 1964. 341 p.  
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(MIRA 16:12)

(Radioisotopes--Industrial applications)

YEGOROV, Yuriy Aleksandrovich; TRIFONOV, D.N., red.; MAZEL', Ye.I.,  
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[Scintillation method of gamma-ray and fast-neutron  
spectrometry] Stsintilliatsionnyi metod spektrometrii  
gamma-izlucheniia i bystrykh neitronov. Moskva, Gosatom-  
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Trudy Inst.ist.est.i tekhn. 39:77-86 '62. (MIRA 16:2)  
(Rare earths) (Berzelius, Jöns Jacob, 1779-1848)

Trifonov, Dmitriy Nikolayevich

53

Problema redkikh zemel' (The Problem of Rare-Earth Elements) Moscow,  
Gosatomizdat, 1962. 219 p. 10,200 copies printed. 27

Ed.: G. M. Pchelintseva; Tech. Ed.: N. A. Vlasova.

PURPOSE: This book is intended for the reader interested in the history of science.

COVERAGE: This book presents the history of the rare-earth elements up to the present and discusses the distribution of these elements in Mendeleev's periodic table. The problem of isotopes and radioactivity of the rare-earth elements is also discussed. A separate chapter is devoted to promethium. The last chapter deals with the practical use of rare-earth elements.

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JULY 1986

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Trifonov, Dmitriy Nikolayevich

Problema redkikh zemel' (The Problem of Rare-Earth Elements) Moscow,  
Gosatomizdat, 1962. 219 p. 10,200 copies printed.

Ed.: G. M. Pchelintseva; Tech. Ed.: N. A. Vlasova.

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Card 1/3

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Periodic system of elements becomes, apparently, unrecognizable  
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29 no.11:65-67 N '62. (MIRA 16:1)

1. Institut neftekhimicheskogo sinteza AN SSSR.  
(Chemical elements)

TRIFANOV, Dmitriy Nikolayevich; LAVRUKHINA, A.K., doktor khim.  
nauk, otd. red.; ALMAZOV, A.B., red. izd-va; DOROKHINA,  
I.N., tekhn. red.

[If there were no uranium and thorium] Esli by ne bylo urana  
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(Chemical elements) (Nuclear geophysics)

TRIFONOV, Dmitriy Nikolayevich; FAYNBOYM, I.B., red.; RAKITIN, I.T.,  
tekhn. red.

[Amazing family of elements] Udivitel'noe semeistvo elementov.  
Moskva, Izd-vo "Znanie," 1963, 39 p. (Novoe v zhizni, nauke,  
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30715. TRIFONOV, D. R.

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Omsk, 1949, s. 51-57.

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SO: Monthly List of Russian Acquisitions, Vol 7, No 3, June 1958.

AID P - 2770

Subject : USSR/Engineering  
Card 1/1 Pub. 110-a - 12/14  
Authors : Moloshnyy, N. M., Trifonov, E. V. and Dumov, V. I.,  
Engs.  
Title : A new design of a turbine pump of the Kaluga Turbine  
Plant (PT-15-60u)  
Periodical : Teploenerg., 9, 58-61, S 1955  
Abstract : The design of a new turbine pump feeding small and  
medium capacity steam power plants is reported and  
a detailed description of the installation is given.  
Six diagrams.  
Institution : Kaluga Turbine Plant  
Submitted : No date

114 - 1 - 3/15

AUTHOR: Trifonov, E. V., Engineer and Yampol'ski, S. L. Eng.

TITLE: The Effect of Oil Pressure on the Load Carrying Capacity of Steam Turbine Thrust Bearings (Vliyaniye davleniya masla na nesushchuyu sposobnost' upornykh podshipnikov parovykh turbin)

PERIODICAL: ENERGOMASHINOSTROYENIYE, 1957, No. 1, pp. 8-11,  
(U.S.S.R.)

ABSTRACT: The article describes tests on thrust bearings of the Mitchell or Kingsbury types. The testing set-up is illustrated by drawing in Fig. 1, p. 8. Fig. 2, p. 9, shows the distribution of the metering points. Fig. 3, p. 9, illustrates the pressure epures along the radius of the thrust disc. The obtained results are described, plotted in graphs (Fig. 5, p. 10) and entered in Table 2, p. 10. On the basis of this, it is concluded that the load carrying capacity of high speed thrust bearings ( $u_{av}$  greater than 45 m/sec,  $n = 5,000 - 10,000$  r.p.m.) is governed primarily by the oil pressure at the inlet to the thrust pads. Under actual operating

Card 1/3

114 - 1 - 3/15

**TITLE:** The Effect of Oil Pressure on the Load Carrying Capacity of Steam Turbine Thrust Bearings (Vliyaniye davleniya masla na nesushchuyu sposobnost' upornykh podshipnikov parovykh turbin)

conditions this factor predominates over the influences of the geometrical shape of the pads, the smoothness of the surfaces, oil temperature, etc. It is because the effect of oil pressure has not been taken into account that some bearings are of poor reliability and have a low load carrying capacity. Depending on the type of bearings and the conditions required pressures range from 0.5 to 10 kg/cm<sup>2</sup>.

There are four figures, one graph and two tables. There are two Slavic and one Swiss reference.

**ASSOCIATION:**

Card 2/3

114 - 1 - 3/15

**TITLE:** The Effect of Oil Pressure on the Load Carrying Capacity of Steam Turbine Thrust Bearings (Vliyaniye davleniya masla na nesushchuyu sposobnost' upornykh podshipnikov parovykh turbin)

**ASSOCIATION:**

**PRESENTED BY:**

**SUBMITTED:**

**AVAILABLE:** Library of Congress

Card 3/3

AUTHOR: Taranenkov, N.M., Engineer; Tsukanov, V.P., Engineer and  
Yampol'skiy, S.L., Engineer. 114-6-1/11

TITLE: Steam turbine support and thrust bearing combined with oil pump. (Oporno'-uporny poishipnik parovoy turbiny sovmeshchenny s maslyanum nasosom.)

PERIODICAL: "Energomashinostroenie" (Power Generation Machinery Construction), 1957, Vol. 3, No. 6, pp. 1 - 5 (U.S.S.R.)

ABSTRACT: Steam turbine thrust bearings are one of the most complicated and least reliable parts of the set. High speed thrust bearings are particularly unsatisfactory. The Kalluga turbine works developed and have since 1954 applied a new design of thrust and support bearing combined with the main turbine oil pump. The special features of this bearing are that: 1) the runner of the centrifugal oil pump, located on the front end of the turbine shaft, serves as the thrust disc; 2) the front support bearing of the turbine also serves as the pump gland; 3) both support and thrust bearings are lubricated by oil at high pressure, since both are located in the pressure chamber of the pump. The construction has been described in detail in an article by N.M. Taranenko. A fairly detailed description with sketches is given in this article. Special tests on a

Card 1/4

Steam turbine support and thrust bearing combined with oil pump. (Cont.) 114-6-1/11

pump-bearing are described. A special test rig was set up with a loading machine driven by an electric motor, oil tanks, filters and coolers and an auxiliary centrifugal oil pump. The oil supply conditions in the turbine set are carefully reproduced. Special investigations are being made into the hydraulic part of the pump-regulator and are not considered in this article. A disadvantage of the test set-up is the limited load carrying capacity of the loading bearing, therefore in making overload tests it was necessary to reduce the number of thrust pads on the bearing being tested. During the test the temperature conditions were studied. The following were measured: 1) the oil pressures in the inlet and discharge chambers and beyond the pump runner and in the thrust bearing oil film; 2) the oil temperatures in the inlet and discharge chambers, at inlet and discharge from the thrust bearing and the temperature on the thrust pad surface and in the oil film; 3) the output of the pump and the quantity of oil passing through the support bearing. The main results of the tests are given in a table and also in a graph of the temperature distribution on the surface of the bearing pads as a function of the specific load. A series of tests was made to deter-

Card 2/4

Steam turbine support and thrust bearing committee report  
pump. (Cont.) 114-6-1/11

dine the load carrying capacity of the thrust bearing. The tests were continued to destruction of the bearing. Some tests were also made to determine the limiting load when the thrust disc was damaged. The specific loads obtained during the tests were high, evidently because in high speed thrust bearings there is a zone of local low pressure caused by the pump effect of the disc and the presence of intense turbulence. In ordinary bearings because the lubrication is at low pressure this pressure reduction can lead to the formation of vacuum zones in which bubbles can be formed. In the present type of bearings this is avoided because the oil supply is at high pressure.

The magnitude of the axial displacement of the rotor in the event of accident was investigated. The usual bearing gives considerable axial displacement when damaged. Because high oil pressure is used in the present bearings other bearing metals can be used which give less displacement than babbitt in the event of accident. In particular brass proved very suitable.

The system of having the support and thrust bearing directly in the chamber of the main oil pump was found to

Card 3/4

Steam turbine support and thrust bearing combined with oil pump. (Cont.) 114-6-1/11

ensure very reliable oil supply.

The use of combined pump and bearing gives reduced mechanical losses. Tests on turbines type AK 4-3 gave a reduction of 12.7 kW. For turbines running at a speed higher than 3 000 r.p.m. the difference was in some cases 20 kW.

The works carried out observations on the operation of bearings of this design on two turbines in service which have now worked for 6 000-9 000 hours. These sets worked under the most varied conditions including frequent water hammer and brief emergency interruption of oil supply. Inspection after a year's operation showed the bearings on both machines were in excellent condition. In addition, a large number of turbines with bearings of this type have passed acceptance tests on the works test bed. It is concluded that these bearing-pumps have the advantages of much higher and more stable load carrying capacity, reliable oil supply, higher efficiency, simpler construction and smaller size.

There are 4 figures, 1 table and 4 literature references (Slavic).

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TRIFONOV, F.I., inzh.

Procedure for awarding qualification grades to retrained locomotive engineers. Elek. i tepl.tiaga 3 no.1:44-45 Ja '59.  
(MIRA 12:2)

(Locomotive engineers)